

# Drought Overview

June 30, 2009  
San Diego



California  
Department of Water Resources

# Outline

- **Hydrologic and water supply conditions**
- **State response actions**
- **Major impacts**
- **Status updates**



# **Water Year 2009**

- **Third consecutive dry year statewide**
- **Increased ESA restrictions on SWP exports from Sacramento-San Joaquin River Delta**
- **Multi-year drought in Colorado River Basin, but no shortages in deliveries**

# Three Year Comparison



	April 1 Sierra Snowpack	Statewide Runoff
<b>2007</b>	<b>40%</b>	<b>53%</b>
<b>2008</b>	<b>100%</b>	<b>58%</b>
<b>2009</b>	<b>85%</b>	<b>71%</b>

Statewide % of avg, 2009 projection as of 6-22-09



# CVP & SWP Reservoir Storage



	% Avg	% Cap
Shasta	77	64
Oroville	72	61
San Luis	32	23

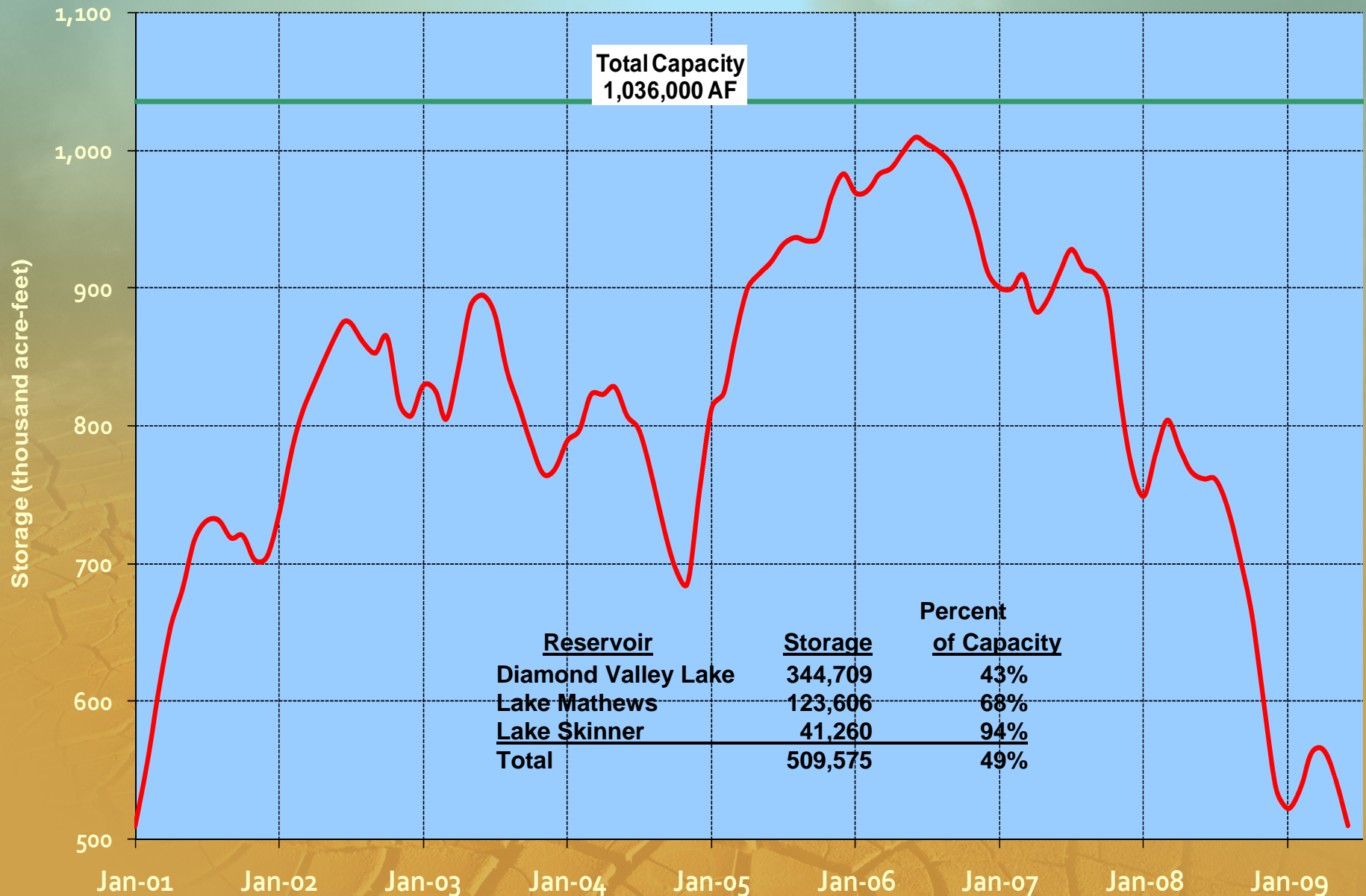


*Lake Oroville 2/3/2009*

- Oroville 2008 - lowest carryover storage since 1977, lowest Jan 1 storage level ever
- San Luis 2009 – lowest high point

As of 6-22-09

# MWD's Combined Reservoir Storage (Lake Skinner, Lake Mathews & Diamond Valley Lake) as of June 1, 2009





# CVP and SWP Deliveries

Year	Type	CVP Allocation South of Delta	SWP Allocation
2006	Wet	100% ag / 100% m&i	100%
2007	Dry	50% ag / 75% m&i	60%
2008	Critical	40% ag / 75% m&i	35%
2009	Dry	10% ag / 60% m&i	40%



**Classifications:** Wet, Above Normal, Below Normal, Dry, Critical

# Changed Delta Conditions

- Longfin smelt – 2008 CA Fish & Game Commission emergency regulations. 2009 listing as threatened, and incidental take permit for DWR
- Delta smelt – 2007-08, court-ordered restrictions on Delta exports. New biological opinion in 2008. Court grants preliminary injunction in 2009, case pending.
- Green sturgeon – threatened listing in 2006. Covered in 2009 salmon biological opinion.
- Sac River winter-run and Central Valley spring-run Chinook salmon, Central Valley steelhead – new biological opinion in June 2009



# **Executive Orders & Emergency Proclamations**

- **June 2008 drought executive order**
- **June 2008 emergency proclamation, 9 Central Valley counties**
- **February 2009 emergency proclamation, statewide water shortage**
- **June 2009 executive order, drought-related social services**

# 2008 Executive Order

- **Directs DWR to operate drought water bank and facilitate water transfers**
- **Directs DWR to expedite water conservation grant programs and directs DWR/CDPH to expedite processing of grant contracts for water systems with drought-related hardships**
- **Directs DWR to take water operations actions to help alleviate agricultural impacts on San Joaquin Valley Westside**
- **Directs DWR/CDPH/CPUC/CALEMA to identify systems at risk of experiencing health and safety impacts, and review system interconnections**



# 2009 Emergency Proclamation

- Requires DWR to implement statewide water conservation campaign & provide technical assistance for local agency water shortage contingency planning
- Requires DWR/SWRCB to expedite processing of water transfer approvals and to take related actions
- Requires DWR to evaluate statewide groundwater conditions
- Requests that urban and agricultural water agencies increase water conservation activities

# 2009 Water Transfers

- Drought water bank  
~82 TAF
- Upstream of Delta to  
San Joaquin Valley  
and Southern  
California ~250 TAF
- Within Sacramento  
Valley ~93 TAF





# Statewide Water Conservation Campaign



[www.saveourH2O.org](http://www.saveourH2O.org)

# **Drought Impacts -- Agricultural**

- **Only 3 California counties presently NOT designated for USDA disaster assistance**
- **Avocado/citrus using imported water in Riverside & San Diego Counties**
- **CVP service area, west side of San Joaquin Valley**
  - **Estimated loss of 31,000-35,000 jobs, income loss to crop production & related businesses of \$848-\$959 million**
  - **Social services impacts – food banks & unemployment services**



# **Drought Impacts -- Urban**

- **Implementation of water conservation programs**
- **Increased costs of service, rate increases**
- **Drawdown of storage reserves**
- **Small water system vulnerabilities**

# Drought Impacts - Wildfire



- Major Southern California fires in 2003 (nearly \$1B in damages) & 2007
- Rainfall puts burn areas at subsequent high risk of debris floods



# **Status Updates by Next Speakers**

- **California Department of Public Health**
- **Water conservation programs**
- **Drought-related emergency authorities**
- **Local groundwater conditions**
- **Planning for IRWM grants**

